[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS News Bulletin 864 25th June 1995

Enquiries to the society should be addressed to the Secretary A.N.A.R.T.S., PO Box 860, Crows Nest, N.S.W. 2065, accompanied by s.a.s.e., or to VK2JPA at VK2AAB. if you have any news or information for inclusion in a subsequent broadcast then please send to the Broadcast Officer, PO Box 60 Blacktown 2148 or address to VK2JPA at VK2AAB on 144.850 MHz.

LOGS FOR ANARTS CONTEST

WELL, LOGS HAVE STARTED ARRIVING ALREADY FOR THE CONTEST HELD EARLIER THIS MONTH. THE FIRST ONE IN CAME FROM HENRY, VK8HA, AT HUMPTY DOO IN THE NORTHERN TERRITORY (AUSTRALIA). WE HAVE ALSO RECEIVED ONE FROM BULGARIA AND WERE SLIGHTLY SURPRISED AT THE SPEED WITH WHICH IT REACHED US. WE HAVE OBSERVED DELAYS IN DELIVERY FROM COUNTRIES IN THAT AREA OF THE WORLD IN PAST YEARS SO FEEL VERY GLAD THAT POSTAL SERVICES HAVE IMPROVED TO THAT EXTENT.

IF YOU ARE AWARE OF POSSIBLE DELAYS IN YOUR COUNTRY, PLEASE POST EARLY, AS THE DEADLINE IS THE DATE RECEIVED, NOT THE DATE POSTED. THAT DEADLINE IS THE 1ST OF SEPTEMBER, SO BE SURE TO POST IN TIME.

HAVE YOU RENEWED YOUR MEMBERSHIP?

IT IS THAT TIME OF THE YEAR AGAIN WHEN FEES ARE DUE. HELP SUPPORT ONE OF THE OLDEST RTTY GROUPS IN THE WORLD IN AMATEUR RADIO. OUR PRESENT MEMBERSHIP IS SMALL AND WE NEED YOUR HELP. JUST SEND TEN DOLLARS TO THE SECRETARY, ANARTS, PO BOX 860 CROWS NEST NSW 2065 AUSTRALIA. INCLUDE YOUR NAME, CALLSIGN, ADDRESS AND ANY OTHER INFORMATION YOU THINK IS INTERESTING, SUCH AS OTHER HOBBIES, MEMBERSHIP IN OTHER DIGITAL GROUPS -- THAT SORT OF THING.

WHILE THE SOCIETY IS BASED IN NEW SOUTH WALES, WE HAVE MEMBERS OVERSEAS AND WOULD LIKE TO HEAR FROM YOU. IF YOU CAN ASSIST IN ANY WAY, PLEASE LET US KNOW. FOR INSTANCE, AT THIS VERY MOMENT WE ARE HAVING PROBLEMS IN OBTAINING OVERSEAS-SOURCED DX BULLETINS, INCLUDING THE ONE THAT WAS OUR OWN FOR SO MANY YEARS BUT IS NOW ORIGINATED IN THE NORTHERN HEMISPHERE. WE THINK ONE OF THE BBS IN THE CHAIN MUST HAVE GONE DOWN AND THE INFORMATION CANNOT REACH US. LISTENING CONDITIONS ARE BAD AND AS A RESULT, WE CANNOT GET THE INFORMATION OFF AIR EITHER. IF YOU HAVE INTERNET CAPABILITIES AND CAN ASSIST, THERE IS AN ADDRESS AT THE END OF THE BULLETIN THAT YOU CAN USE. (I HAVE TRIED A NUMBER OF TIMES TO ACCESS THE ADDRESSES INCLUDED AT THE END OF THE DXNEWS BUT MY LOCAL SYSTEM CANNOT FIND THEM -- CURIOUS -- ED.)

EVEN IF YOU DO NOT WANT TO JOIN US, WHAT ABOUT DROPPING US A LINE ANYWAY AND LETTING US KNOW WHAT YOU THINK OF THE BROADCAST, SO THAT WE MAY INCORPORATE YOUR THOUGHTS.

CHEERS

ULYSSES BEGINS EXPLORATION OF THE SUN'S NORTHERN POLE

The Ulysses spacecraft has begun to explore the northern pole of the Sun, initiating the second phase of its primary mission to study regions above and below the Sun never before explored by spacecraft.

Ulysses, a joint NASA-European Space Agency mission, climbed to 70 degrees north of the Sun's equator at 4 a.m. EDT today (19th June). The spacecraft will spend the next 110 days gathering data on the complex forces at work over this high-latitude region of the Sun, reaching a maximum northern latitude of 80.2 degrees on July 31.

As the spacecraft begins its pass over the northern polar region of the Sun, scientists are reporting a variety of new discoveries from Ulysses' recently completed pass over the southern pole. These findings are allowing them to begin assembling a new, three-dimensional picture of the Sun. Among their latest results:

* Ulysses has verified global differences in the speed of the wind flowing out from the Sun at different latitudes. Most notably, solar winds at high southern latitudes traveled at roughly double the speed found in the equatorial zone. The solar winds flow at approximately two million miles per hour (800 kilometers per second) at high southern latitudes, while dropping in velocity to about one million miles per hour (400 kilometers) near the equator.

* The loss of material from the Sun over the south pole, caused by the flow of the solar wind, is roughly one million tons per second. This matter consists of hydrogen, helium and a small fraction of metals and heavy atoms. Results of the southern pass also revealed the outward pressure of the solar wind to be much greater over the pole than it is around the equator. As a consequence, the shape of the heliosphere -- that region of space dominated by solar particles and electromagnetic fields -- may be elongated in the polar direction, extending much farther out into interstellar space than it does near the equator.

* High energy cosmic radiation entering the inner solar system and, eventually, Earth's atmosphere, from the galaxy is controlled at all latitudes by the level of solar activity, which is determined by each phase of the Sun's 11-year sunspot cycle. The findings suggest the Sun's control over how much cosmic radiation enters the solar system is just as effective in the polar regions as it is near the equator.

* Plasma waves -- electrical and magnetic fields that result from unstable distributions in the particles making up the solar wind -- play a role in regulating the behavior of solar wind particles and were expected to be found at nearly identical levels in both hemispheres of the Sun. However, as Ulysses crossed the Sun's equator and entered the northern hemisphere, observations revealed significantly higher levels of several varieties of plasma waves in the northern region of the Sun, compared to their presence in the southern hemisphere. The cause of this asymmetry is not yet understood, but plasma wave measurements will continue to be used as a diagnostic tool for studying the local properties of the solar

wind along the spacecraft's trajectory.

Coordinated observations are under way using Ulysses and a recently launched NASA spacecraft called Wind, designed to study the solar wind flowing between the Sun and Earth. In addition, these two Sun probes are successfully tracking electrons which stream away from the Sun after the eruption of solar flares in the Sun's outer atmosphere.

These measurements will allow scientists to map for the first time the magnetic field lines along which electrons travel and provide new insights and observations into large-scale magnetic field structures occurring in the solar wind.

INFORMATION COURTESY OF NASA

IPS WEEKLY SOLAR AND GEOPHYSICAL REPORT
(16 JUNE - 22 JUNE)

ISSUED ON 23 JUNE 1995

SUMMARY

Date	16	17	18	19	20	21	22
10cm	71	70	70	71	72	72	73
A	11	5	16	24	17	11 (	9)
T	25	20	29	23	21	20	22

SOLAR ACTIVITY WAS VERY LOW THROUGHOUT THE PERIOD.

THE GEOMAGNETIC FIELD AT LEARMONTH (W.A.) WAS QUIET ON 17TH JUNE; QUIET TO UNSETTLED 16TH, 18TH, AND 21ST TO 22ND; QUIET TO ACTIVE 19TH AND 20TH.

IONOSPHERIC F2 CRITICAL FREQUENCIES WERE MOSTLY NEAR PREDICTED MONTHLY VALUES, WITH 30 PER CENT ENHANCEMENTS DURING LOCAL NIGHT ON 16TH AND 18TH JUNE. SPREAD F WAS OBSERVED DURING LOCAL NIGHT ON 21ST AND 22ND.

FORECAST (23 JUNE - 29 JUNE)

SOLAR: VERY LOW

GEOMAGNETIC: 26-29: ACTIVE TO MINOR STORM.

IONOSPHERIC: MUFS NEAR PREDICTED MONTHLY VALUES THEN DEPRESSED ABOUT 10 PER CENT 26-28 JUNE.

COURTESY OF THE IPS RADIO AND SPACE SERVICES

COMMENT FROM IPS FOR MAY

THE MONTHLY-AVERAGED SUNSPOT NUMBER FOR MAY WAS VERY LOW, BEING ONLY MARGINALLY LARGER THAN LAST MONTHS VALUE WHICH WAS THE LOWEST IN THE DECLINE OF THIS CYCLE. THE LOW LEVEL OVER THE LAST TWO MONTHS IS SIMILAR TO THAT EXPECTED NEAR SOLAR MINIMUM WHICH IS THE TIME AT WHICH THE SUNSPOT NUMBER BEGINS TO RISE AT THE START OF THE NEW SOLAR CYCLE.

UNFORTUNATELY, (AT LEAST FOR THOSE WHO LIKE AN ACTIVE SUN)
OTHER INDICATORS SUGGEST THAT WE HAVE STILL SOME WAY TO GO
BEFORE SOLAR MINIMUM AND THE ONSET OF THE NEW CYCLE.

RTDX0609 RTTY DX

VK2SG RTTY DX NOTES FOR WEEKENDING 9 JUNE 95 (BID RTDX0609)

Our thanks this week go to: ZS5S, W2JGR, WB2CJL, WX5L, AA5AU,
N5PSI, N5UXT, JH2PDS/1, JF1MGI, IK1CJO, I1JQJ and the 425 DX
gang, I5IGQ, DJ3IW and the Cent-Europe DXCluster Node DB0SPC,
the NJ0M Node of Minnesota and IK5PWJ PacketCluster.

BANDPASS:
FRIDAY 2
1445-14090 TL8GM
1808-14069 5Z4FM PCT
1853-14085 PP7GAG
1929-14069 9G1BS PCT
2049-14088 9K2RA
2251-14084 SV2BXZ
2306-14084 FG5FI

SATURDAY 3
0634-14069 S92ZM PCT
0658-14069 7Q7LA PCT
1329-14083 4L1BR
1538-14088 IY0ORP
1600-14080 CX7BF Amtor
1625-14082 BV9P
1636-14085 7Q7AN
1907-14085 4L1BR
1946-14083 6W1/F5NHJ
2326-14085 KP4GC

SUNDAY 4
0010-14086 KP2BH
0038-14083 3V8BB qsx up via JF2EZA
0519-14082 BV9P
1347-14085 EW8DS
1348-14084 SV2DGH
1356-14083 YT7CC
1500-14085 UN7GY
1523-14081 7Q7AN Qsl PA3DUU
1543-14080 3V8BB
1626-14093 EX2U
1637-14081 EA8PDT
1738-14081 VP8CQS
1958-14085 4L1BR
2133-14083 TY1PS
2210-14086 SV2DGH
2218-14087 J88BS
2220-14083 VK2KM
2232-14084 KP4VP
2244-14087 AZ7FAF
2336-14085 YV5KXE

MONDAY 5
1154-14087 CT1AAL
1625-14089 EX7MA
1627-14087 7Q7AN

1710-14084 4L1BR
1727-14089 5R8DG Qsl F6FNU
1828-14081 VE8NC Zone 1
2106-14086 GI4WXA
2246-14081 CO2JE

TUESDAY 6
0020-14081 VP5JM
0032-14081 X5EBL Bosnian Serb
0506-14086 7Q7AN
0511-14086 UX4UA
1123-14083 GD4EBA
1319-14084 VY2RO Prince Edward I.
1519-14083 GI4WXA
2336-14090 ZP6CC

WEDNESDAY 7
0249-14081 PT2ND
1226-14081 JF1MGI
1606-14078 UR5TF
1608-14084 ER2ED
1644-14083 UA9TK
1724-14088 VY2RO
1734-14086 RA2FS
1736-14083 5R8DG
1736-14089 7N1QPV
1756-14083 4S7/JH4FM
0249-14086 PT2ND

THURSDAY 8
0217-14084 A45ZX
0439-14085 UX4UA
1654-14084 4J0/IK2BHX
1704-14088 UN7GY

NOTES OF INTEREST:

AZERBAIJAN, 4J. Piero, IK2BHX is now ready also on RTTY tnx to Chiru, JA3DLE/1 who supported him with a TNC. He promised much activity also on this mode. Qsl is via IK2MRZ.

SOUTH SHETLAND, VP8. VP8CQS has a new QSL route. It is: Andrzej Grotha,SP2GOW, ul Mikolaja Gomolki 5 m 1, 80-279 Gdansk. Poland.

The VK2SG RTTY DXNOTES are also available on Internet via Telnet or FTP at ab6z.ampr.org, at reflectors dx@ve7tcp.ampr.org, and digital-dx@st.rim.or.jp. See also the OH2BUA WebCluster at URL http://www.clinet.fi/~jukka/webcluster.html

For next week's bulletin send your bandpass to Bob, WB2CJL @ W5KSI.#NOLA.LA.USA.NA.

COMING EVENTS

JULY	2nd	DARC CORONA 10m Digital contest
	8TH-9TH	BARTG AMTOR/PACTOR CONTEST
	15TH-16TH	DARC HF RTTY CONTEST
AUGUST	19th-20th	SARTG WW RTTY CONTEST

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President(Col) VK2CTD at VK2XSB, or the Secretary (Pat) VK2JPA at VK2AAB.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA at VK2AAB. Email address for the Broadcast Officer is :

patl(at)pitt.conmusic.su.oz.au

The Society welcomes news items on any digital subjects from anywhere in the broadcast coverage area. We are looking for-ward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

--
Dave Horsfall (VK2KFU) | dave@esi.com.au | VK2KFU @ VK2AAB.NSW.AUS.OC | PGP 2.6
Opinions expressed are mine. | E7 FE 97 88 E5 02 3C AE 9C 8C 54 5B 9A D4 A0 CD